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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/537,079      | 06/01/2005  | Brita Diego          | FE 6106+6085 (US)   | 8247             |

34872 7590 07/03/2006

BASELL USA INC.  
INTELLECTUAL PROPERTY  
912 APPLETON ROAD  
ELKTON, MD 21921

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| EXAMINER |
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PASTERCZYK, JAMES W

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1755

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/537,079 | <b>Applicant(s)</b><br>DIEGO ET AL. |  |
|                              | <b>Examiner</b><br>J. Pasterczyk     | <b>Art Unit</b><br>1755             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/15/05</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1755

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: it is not executed, and it appears to be an oath from PCT prosecution, not US national prosecution.

2. The abstract of the disclosure is objected to because the coefficients on the number of carbon atoms are not subscripted, and the last line is not quite grammatical; in addition this last line should be drawn to Ziegler-Natta catalysts only since those are the only types which appear to be properly enabled in the specification. Correction is required. See MPEP § 608.01(b).

3. Claims 1, 4, 7-9, 14, 15, 19, 20, 23, 24, 25 and 28-30 are objected to because of the following informalities: in claims 1, 4, 7, 8, 9, 14, 15, 19, 24, 25, and 28, the coefficients on the carbon atoms of R are not subscripted. In claim 6 correct the spelling of tetrahydrofuran. In claim 16 “derives” would be better phrased --is made--. In claim 20, change “selected from” to --a--, make “compounds” singular, and delete “comprised”. In claims 23 and 24, l. 2, change “selected from” to --a-- and make “ethers” singular. Further in claim 24, first line after the structure, radicals are not equal or different, they are the same or different as recited in claim 23; in the third line from the end make “radical” plural in both instances. In claims 29 and 30, change “selected from . . . and” to -- . . . or--. Appropriate correction is required.

4. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1755

In each independent claim, it is not clear how a silane can be a Lewis base since it has no lone pairs of electrons to donate to a corresponding Lewis acid. However, siloxanes, aka silicates or silicon ortho esters, would have oxygen atoms bonded to the silicon atoms and these oxygen atoms would have lone pairs of electrons available for donation to Lewis acid sites. Further in each independent claim, in the second line, "selected from" should be followed by --the group consisting of-- and the conjunction between the last two members of the closed Markush group should be --and--, not "or". This latter problem is also found in claims 2, 3, 21, 22, and 23 (twice).

5. Claims 19 and 22-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the catalyst being a Ziegler-Natta catalyst, does not reasonably provide enablement for e.g. a metallocene or ruthenium carbene catalyst. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. The support is conventionally known as one for Ziegler-Natta catalysts, and the examples are all drawn to such catalysts; one of ordinary skill in the art would be required to perform undue experimentation to determine whether any other catalysts that require aluminum alkyl cocatalysts are capable of functioning with the claimed support.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1755

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-13 and 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al., USP 6,034,025 (hereafter referred to as Yang).

Yang discloses the invention as claimed (abstract; col. 3, l. 45 to col. 4, l. 59).

9. Claims 1-13 and 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Iiskolan et al., USP 4,829,034 (hereafter referred to as Iiskolen).

Iiskolan discloses the invention as claimed (col. 5-6, example 1).

10. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iiskolen in view of Yang, both as cited above.

The disclosure of Iiskolen has been discussed above.

Iiskolen lacks in its example 1 the use of a further solvent or the direct combination of the magnesium halide/alcohol adduct with a further Lewis base.

However, Yang at col. 4, l. 22-30, teaches that the combination of the various ingredients that go to make up a magnesium chloride adduct support may conventionally occur in an inert hydrocarbon solvent., and since the alcohols of Yang and Iiskolen are already Lewis bases, the addition of a further Lewis base would have been conventional to the routineer in the art.

It would have been obvious to one of ordinary skill in the art to apply the teaching of Yang to the disclosure of Iiskolen with a reasonable expectation of obtaining a highly-useful

Art Unit: 1755

method of making a magnesium chloride adduct with the expected benefit of being able to obtain finer particle sizes by breaking up the product by stirring in solution as it is made.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Pasterczyk

AU 1755

6/27/06



ELIZABETH D. WOOD  
PRIMARY EXAMINER

AU 1755